Use Attainability Analysis

for

WBID 1268 Tributary to Massey Creek

Submitted by
BWR

June 1, 2007

Submitted to:
Missouri Department of Natural Resources
Division of Environmental Quality
Water Protection Program

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

I. Water Body Information (For water body being surveyed)

Water Body Name (from USGS 7.5' quad):	Tributary to Massey Creek
Missouri Water Body Identification (WBID) Number:	1268
8-digit HUC: 10290108	County: CASS
Upstream Legal Description (from Table H):	33, 45N, 33W
Downstream Legal Description(from Table H):	Mouth
Number of sites evaluated	3
List all sites numbers, listed consequently upstream to downstream:	1, 2, 3

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest.

II. Subegmentation (fill this section out only in cases where subesgmentation is being proposed)

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)			
Upstream Coordinates: UTM X	Y	Downstream Coordinates: UTM X	Y

HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)			
Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			

HORIZONTAL ACCURACY ESTIMATE			
GPS Data Quality		Interpolation Data Quality	
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____	
EPE	± 46 Feet or ± _____ Meters		
PDOP		± _____ Feet or ± _____ Meters	

III. Discharger Facility Information (list all permitted dischargers on the stream)

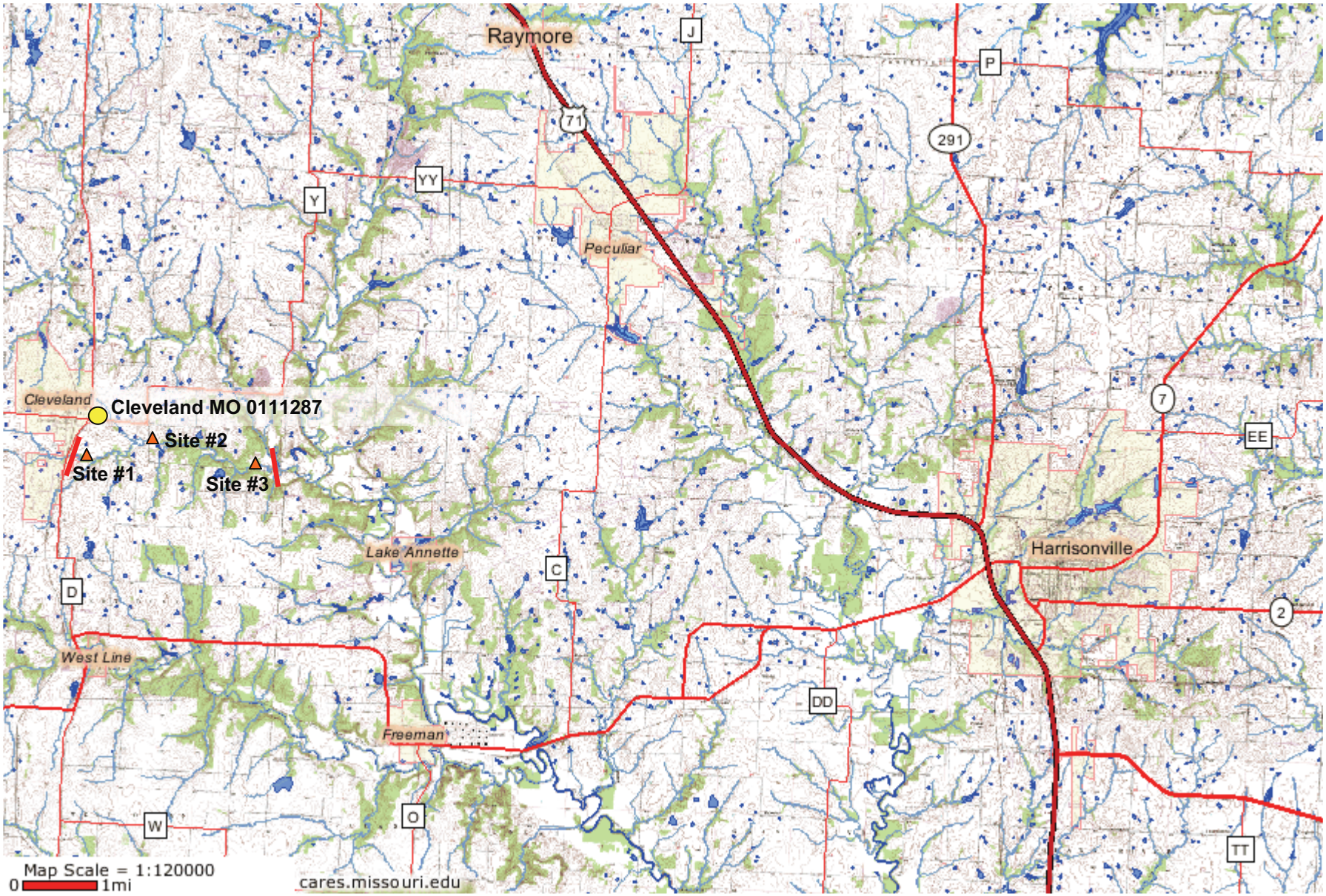
Discharger Facility Name(s):	Cleveland
Discharger Permit Number(s):	MO0112623

IV. UAA Surveyor (please print legibly)

Name of Surveyor Amy M. Dziatkowiak	Telephone Number: 816-363-2696
Organization/Employer: BWR	
Position: Environmental Sci	

Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.

Signed: Amy M. Dziatkowiak **Date:** May 11, 2007



BWR
Right in the Center

Tributary to Massey Creek
WBID #1268

N

WBID# 1268
Site# 1

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

Date & Time: May 22, 2007 2PM	Site Location Description (e.g., road crossing): Downstream of Bridge crossing off of D
Personnel (Data Collectors): Amy Drialowski, John Carey	
Current Weather Conditions: Sunny	Facility Name: Cleveland
Weather Conditions for Past 10 days: Rain 48 hours ago	Permit Number: MO 8111287
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 094.59317W Y: 38.67172N

HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)

Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			

HORIZONTAL ACCURACY ESTIMATE

GPS Data Quality		Interpolation Data Quality
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____
EPE	± 46 Feet or ± _____ Meters	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose

Uses Observed*: (Uses actually observed at time of survey.)

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☐ Steep slopes	☒ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☐ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: —

Channel Feature
RUN: 85%
RIFFLE: 10%
POOL: 5%

*** Page Two – Data Sheet B for WBID #** 1268 : site 1

Stream Morphology:

Upstream View's Physical Dimensions: Is there any water present at this view? ☐ Yes ☐ No

If so, is there an obvious current? ☐ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view? ☐ Yes ☐ No

If so, is there an obvious current? ☐ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Substrate*: (These values should add up to 100%.)

25 % Cobble	% Gravel	% Sand	% Silt	% Mud/Clay	75 % Bedrock

Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

Algae on rocks

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☐ Fine sediments	☒ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☒ None	☐ Other:

Comments: Please attach any additional comments () to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.

Surveyor's Signature: Amy M Brink Date of Survey: 5/22/07

Organization: BWK Position: Env. Sci.

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 1

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect A 1	wetted width	<0.1m			1 Channel Feature:	
2	4.5 m	0.2m			2 ~~RUN~~	
3		0.2m			3	
4	measurements	0.3m			4 Dissolved Oxygen	
5	0.45 m	0.3m			5	
6	apart	0.2m			6 8.1 ppm	
7		0.2m			7 81 %	
8		0.2m			8	
9		0.2m			9	
10		<0.1m			10	
					11	
Transect B 1	wetted width	<0.1m			12 Channel Feature:	
2	3.5 m	0.1m			13 RUN	
3		0.1m			14	
4	measurements	0.1m			15 Dissolved Oxygen:	
5	0.35 m	0.1m			16	
6	apart	0.1m			17 8.2 ppm	
7		0.1m			18 82 %	
9		0.1m			19	
9		0.1m			20	
10		0.1m			21	
					22	
Transect C 1	wetted width	<0.1m			23 Channel Feature:	
2	4.0 m	<0.1m			24 POOL	
3		0.1m			25	
4	measurements	0.1m			26 Dissolved Oxygen	
5	0.4 m	0.2m			.	
6	apart	0.2m			. 8.3 ppm	
7		0.2m			. 83 %	
8		0.1m			n	
9		0.1m				
10		<0.1m				

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Kyselova **Date:** 5/22/07

Organization: BNR Position: ENV. SCI

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 1

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect D 1	wetted width	<0.1m			1 Channel Feature:	
2	4.0 m	<0.1m			2 Run	
3		0.1m			3	
4	measurements	0.1m			4 Dissolved Oxygen	
5	0.4 m	0.1m			5	
6	apart	0.1m			6 8.3 ppm	
7		0.1m			7 83 %	
8		0.1m			8	
9		0.1m			9	
10		<0.1m			10	
					11	
Transect E 1	wetted width	<0.1m			12 Channel Feature:	
2	3 m	<0.1m			13 Run	
3		0.1m			14	
4	measurements	0.1m			15 Dissolved Oxygen:	
5	0.3 m	0.2m			16	
6	apart	0.2m			17 8.5 ppm	
7		0.1m			18 95 %	
8		0.1m			19	
9		0.1m			20	
10		<0.1m			21	
					22	
Transect F 1	wetted width	<0.1m			23 Channel Feature:	
2	3 m	0.2m			24 Run/Pool	
3		0.3m			25	
4	measurements	0.4m			26 Dissolved Oxygen	
5	0.3 m	0.4m			.	
6	apart	0.4m			. 8.1 ppm	
7		0.3m			. %	
8		0.1m			n	
9		0.1m				
10		<0.1m				

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Bystrom **Date:** 5/22/07

Organization: BWR Position: Env. Sci

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 1

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect G 1	wetted width	<0.1m			1 Channel Feature:	
2	4.5 m	0.2m			2 RUN	
3		0.3m			3	
4	measurements	0.3m			4 Dissolved Oxygen	
5	0.5m	0.4m			5 RUN	
6	apart	0.5m			6 8.0 ppm	
7		0.4m			7 80 %	
8		0.2m			8	
9		0.1m			9	
10		<0.1m			10	
					11	
Transect H 1	wetted width	<0.1m			12 Channel Feature:	
2	2m m	<0.1m			13 RIFFLE	
3		<0.1m			14	
4	measurements	<0.1m			15 Dissolved Oxygen:	
5	0.2 m	<0.1m			16	
6	apart	<0.1m			17 8.6 ppm	
7		<0.1m			18 86 %	
8		0.1m			19	
9		<0.1m			20	
10		<0.1m			21	
					22	
Transect I 1	wetted width	0.1m			23 Channel Feature:	
2	5.5 m	0.1m			24 RUN	
3		0.1m			25	
4	measurements	<0.1m			26 Dissolved Oxygen	
5	0.5 m	0.1m			.	
6	apart	<0.1m			. 8.4 ppm	
7		0.1m			. 84 %	
8		<0.1m			n	
9		<0.1m				
10		<0.1m				

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Bystack **Date:** May 22, 2007

Organization: BWR Position: ENV. SCI

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 1

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect J	1	wetted width	<0.1m			1 Channel Feature:	
	2	4.5 m	0.1m			2 RUN	
	3		0.1m			3	
	4	measurements	<0.1m			4 Dissolved Oxygen	
	5	0.45 m	<0.1m			5	
	6	apart	<0.1m			6 8.8 ppm	
	7		0.1m			7 88 %	
	8		0.1m			8	
	9		0.2m			9	
	10		0.1m			10	
						11	
Transect K	1	wetted width	<0.1m			12 Channel Feature:	
	2	3 m	<0.1m			13 RUN	
	3		0.1m			14	
	4	measurements	0.1m			15 Dissolved Oxygen:	
	5	0.3 m	0.1m			16	
	6	apart	0.1m			17 9.2 ppm	
	7		0.1m			18 92 %	
	8		0.1m			19	
	9		<0.1m			20	
	10		<0.1m			21	
						22	
Transect L	1	wetted width				23 Channel Feature:	
	2	m				24	
	3					25	
	4	measurements				26 Dissolved Oxygen	
	5	m				.	
	6	apart				. ppm	
	7					. %	
	8					n	
	9						
	10						

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

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Signed: Amy M. Beatty **Date:** 5/22/07

Organization: BWR Position: ENV. Sci

WBID# D68
Site# 2

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

Date & Time: May 22, 2007	Site Location Description (e.g., road crossing): Downstream of bridge off of Project
Personnel (Data Collectors): Amy Dialowski, John Carey	
Current Weather Conditions: Sunny	Facility Name: Cleveland
Weather Conditions for Past 10 days: Rain 48 hours ago	Permit Number: MO0111207
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 094.57340W Y: 38.67474N

HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)

Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			

HORIZONTAL ACCURACY ESTIMATE

GPS Data Quality		Interpolation Data Quality
FOM	±_____Meters	Source Map Scale: 1:24,000 1:100,000 Other _____
EPE	± 25 Feet or ±_____Meters	±_____Feet or ±_____Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
1	up	2	down		

Uses Observed*: (Uses actually observed at time of survey.)

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☒ Steep slopes	☐ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☐ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: —

Channel Feature
RUN: 80%
RIFFLE: 10%
POOL: 10%

*** Page Two – Data Sheet B for WBID # 1268 : Site 2**

Stream Morphology:

Upstream View's Physical Dimensions: Is there any water present at this view? ☐ Yes ☐ No

If so, is there an obvious current? ☐ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view? ☐ Yes ☐ No

If so, is there an obvious current? ☐ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Substrate*: (These values should add up to 100%.)

10 % Cobble	% Gravel	% Sand	% Silt	% Mud/Clay	90 % Bedrock

Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

Macrophytes

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☐ Clear	☒ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☒ Solids	☐ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☒ None	☐ Other:

Comments: Please attach any additional comments () to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.

Surveyor's Signature: Amy M. Lyndaker Date of Survey: 5/22/07

Organization: BWR Position: Env. Sci

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 2

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect A 1	wetted width	<0.1m			1 Channel Feature:	
2	3.5 m	0.1m			2 RUN	
3		0.1m			3	
4	measurements	0.1m			4 Dissolved Oxygen	
5	0.35 m	0.1m			5	
6	apart	0.1m			6 12.2 ppm	
7		<0.1m			7 ___ %	
8		0.1m			8	
9		0.1m			9	
10		<0.1m			10	
					11	
Transect B 1	wetted width	<0.1m			12 Channel Feature:	
2	6.5 m	0.1m			13 RUN	
3		0.2m			14	
4	measurements	0.2m			15 Dissolved Oxygen:	
5	0.65 m	0.2m			16	
6	apart	0.1m			17 11.8 ppm	
7		0.2m			18 118 %	
9		0.2m			19	
9		0.1m			20	
10		0.1m			21	
					22	
Transect C 1	wetted width	0.1m			23 Channel Feature:	
2	3.5 m	0.2m			24 RUN	
3		0.2m			25	
4	measurements	0.2m			26 Dissolved Oxygen	
5	0.35 m	0.2m			.	
6	apart	0.2m			. 11.7 ppm	
7		0.2m			. ___ %	
8		0.1m			n	
9		<0.1m				
10		<0.1m				

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Gutierrez **Date:** 5/22/07

Organization: BWR Position: Env. Sci

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 2

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect D 1	wetted width	<0.1m			1 Channel Feature:	
2	8.0 m	<0.1m			2 RIFFLE / POOL	
3		0.1m			3	
4	measurements	<0.1m			4 Dissolved Oxygen	
5	0.8 m	<0.1m			5	
6	apart	<0.1m			6 11.1 ppm	
7		<0.1m			7 ____ %	
8		<0.1m			8	
9		<0.1m			9	
10		<0.1m			10	
					11	
Transect E 1	wetted width	<0.1m			12 Channel Feature:	
2	6m m	<0.1m			13 RIFFLE	
3		<0.1m			14	
4	measurements	<0.1m			15 Dissolved Oxygen:	
5	0.6 m	<0.1m			16	
6	apart	<0.1m			17 13.1 ppm	
7		<0.1m			18 ____ %	
8		<0.1m			19	
9		<0.1m			20	
10		<0.1m			21	
					22	
Transect F 1	wetted width	<0.1m			23 Channel Feature:	
2	8.5 m	<0.1m			24 RUN	
3		<0.1m			25	
4	measurements	<0.1m			26 Dissolved Oxygen	
5	0.85 m	<0.1m			.	
6	apart	0.4m			. 13.2 ppm	
7		<0.1m			. ____ %	
8		0.1m			n	
9		0.1m				
10		<0.1m				

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Gilbert **Date:** 5/22/07

Organization: BWR Position: ENV. SCI.

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 2

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect G	1	wetted width	<0.1m			1 Channel Feature:	
	2	5.5 m	<0.1m			2 RUN	
	3		<0.1m			3	
	4	measurements	<0.1m			4 Dissolved Oxygen	
	5	0.55 m	<0.1m			5	
	6	apart	0.1m			6 15.0	ppm
	7		0.1m			7 100	%
	8		0.1m			8	
	9		0.2m			9	
	10		0.2m			10	
						11	
Transect H	1	wetted width	<0.1m			12 Channel Feature:	
	2	8.0 m	0.1m			13 RUN	
	3		0.1m			14	
	4	measurements	0.1m			15 Dissolved Oxygen:	
	5	0.8 m	0.1m			16	
	6	apart	0.1m			17 12.3	ppm
	7		0.1m			18 120	%
	9		0.1m			19	
	9		<0.1m			20	
	10		<0.1m			21	
						22	
Transect I	1	wetted width	<0.1m			23 Channel Feature:	
	2	6.5 m	<0.1m			24 RUN	
	3		0.1m			25	
	4	measurements	0.1m			26 Dissolved Oxygen	
	5	0.65 m	0.1m			.	
	6	apart	0.1m			. 12.5	ppm
	7		0.1m			. 130	%
	8		0.1m			n	
	9		0.1m				
	10		<0.1m				

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Gustafson **Date:** 5/22/07

Organization: BWR Position: ENV. SCI.

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 2

		Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect S	1	wetted width	<0.1m			1 Channel Feature:	
	2	10 m	0.2m			2 Pool	
	3		0.2m			3	
	4	measurements	0.2m			4 Dissolved Oxygen	
	5	1.0 m	0.2m			5	
	6	apart	0.2m			6 11.3 ppm	
	7		0.2m			7 ____ %	
	8		0.2m			8	
	9		0.2m			9	
	10		0.1m			10	
						11	
Transect K	1	wetted width	<0.1m			12 Channel Feature:	
	2	7.5 m	0.1m			13 Run	
	3		0.2m			14	
	4	measurements	0.3m			15 Dissolved Oxygen:	
	5	0.75 m	0.4m			16	
	6	apart	0.3m			17 10.4 ppm	
	7		0.3m			18 100 %	
	9		0.2m			19	
	9		0.2m			20	
	10		0.1m			21	
						22	
Transect	1	wetted width				23 Channel Feature:	
	2	____ m				24	
	3					25	
	4	measurements				26 Dissolved Oxygen	
	5	____ m				.	
	6	apart				. ____ ppm	
	7					. ____ %	
	8					n	
	9						
	10						

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Ryntz **Date:** May 22, 2007

Organization: BWR Position: Env. Sci.

WBID# 1268
Site# 3

Field Data Sheets for Recreational Use Stream Surveys
Data Sheet B - Site Characterization
(must be completed for each site)

Date & Time: May 22, 2007	Site Location Description (e.g., road crossing): upstream from crossing at Gosh Road
Personnel (Data Collectors): Amy Dziadowski, John Lang	
Current Weather Conditions: Sunny	Facility Name: Cleveland
Weather Conditions for Past 10 days: Rain 48 hours ago	Permit Number: MO 6111287
Drought Conditions?: No drought ☒; Phase I ☐; Phase II ☐; Phase III ☐; Phase IV ☐; Unknown ☐	

Site Locations:

LOCATION COORDINATES (UNIVERSAL TRANSVERSE MERCATOR PROJECTION, IN METERS)

Site GPS Coordinates: UTM X: 094.54128 W Y: 38.66950 N

HORIZONTAL COLLECTION METHOD (Indicate the method used to determine the locational data.)

Global Positioning System (GPS)		Interpolation	
Static Mode		Topographic Map or DRG	
Dynamic Mode (Kinematic)		Aerial Photograph or DOQQ	
Precise Positioning Service		Satellite Imagery	
Signal Averaging		Interpolation Other	
Real Time Differential Processing			

HORIZONTAL ACCURACY ESTIMATE

GPS Data Quality		Interpolation Data Quality
FOM	± _____ Meters	Source Map Scale: 1:24,000 1:100,000 Other _____
EPE	± _____ Feet or ± _____ Meters	± _____ Feet or ± _____ Meters
PDOP		

Photos:

Upstream Photos		Downstream Photos		Other Photos	
Photo ID#	Photo Purpose	Photo ID#	Photo Purpose	Photo ID#	Photo Purpose
1	up	2	down		

Uses Observed*: (Uses actually observed at time of survey.)

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ Other:

Describe: (Include number of individuals recreating, photo-documentation of evidence of recreational uses, etc. Use *Data Sheet D- Recreational Use Interview* when conducting interviews.)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☐ Steep slopes	☒ None of the above	☐ Other:

Comments:

Indications of Human Use*: (attach photos)

☐ Roads	☐ Rope swings	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Camping Sites		☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle	☐ Other:

Comments: —

Channel Feature

RUN: 80%
RIFFLE: 15%
POOL: 5%

*** Page Two – Data Sheet B for WBID #** 1268: site 3

Stream Morphology:

Upstream View's Physical Dimensions: Is there any water present at this view? ☐ Yes ☐ No

If so, is there an obvious current? ☐ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Downstream View's Physical Dimensions: Is there any water present at this view? ☐ Yes ☐ No

If so, is there an obvious current? ☐ Yes ☐ No

Select one of the following channel features:

Channel Feature	Distance from access (m)	Width (m)	Length (m)	Median Depth (m)	Max. Depth (m)
RIFFLE					
RUN					
POOL					

Substrate*: (These values should add up to 100%.)

% Cobble	% Gravel	% Sand	% Silt	100 % Mud/Clay	% Bedrock

Aquatic Vegetation*: (Note amount of vegetation or algal growth at the assessment site)

None

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☒ Solids	☐ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☒ None	☐ Other:

Comments: Please attach any additional comments () to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

Please verify that you have completed all sections, checked all applicable boxes and that everything is complete.

Surveyor's Signature: Ann M. Gustin Date of Survey: 5/22/07

Organization: BWR Position: Env. Sci

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 3

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect A 1	wetted width	<0.1 m			1 Channel Feature:	
2	4.0 m	0.2m			2 RUN	
3		0.2 m			3	
4	measurements	0.3m			4 Dissolved Oxygen	
5	0.4 m	0.3m			5	
6	apart	0.2m			6 9.0 ppm	
7		0.2m			7 90 %	
8		0.2m			8	
9		0.1m			9	
10		<0.1m			10	
					11	
Transect B 1	wetted width	<0.1m			12 Channel Feature:	
2	3m m	0.1m			13 RUN	
3		0.1m			14	
4	measurements	0.2m			15 Dissolved Oxygen:	
5	0.3 m	0.1m			16	
6	apart	0.1m			17 8.5 ppm	
7		0.1m			18 85 %	
8		<0.1m			19	
9		<0.1m			20	
10		<0.1m			21	
					22	
Transect C 1	wetted width	<0.1m			23 Channel Feature:	
2	3.5 m	0.1m			24 RUN	
3		0.1m			25	
4	measurements	0.1m			26 Dissolved Oxygen	
5	0.35 m	0.1m			.	
6	apart	0.1m			. 8.3 ppm	
7		0.1m			. %	
8		0.1m			n	
9		0.1m				
10		<0.1m				

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Bratcher **Date:** 5/22/07

Organization: BWR Position: Env. Scientist

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 3

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect D 1	wetted width	<0.1m			1 Channel Feature:	
2	1.0 m	0.1m			2 RIFFLE	
3		0.1m			3	
4	measurements	0.1m			4 Dissolved Oxygen	
5	0.1 m	0.1m			5	
6	apart	0.1m			6 8.4 ppm	
7		0.1m			7 %	
8		0.1m			8	
9		0.1m			9	
10		0.1m			10	
					11	
Transect E 1	wetted width	<0.1m			12 Channel Feature:	
2	1.5 m	0.1m			13 RIFFLE	
3		0.1m			14	
4	measurements	0.1m			15 Dissolved Oxygen:	
5	0.15 m	0.1m			16	
6	apart	0.1m			17 8.5 ppm	
7		0.1m			18 %	
8		<0.1m			19	
9		<0.1m			20	
10		<0.1m			21	
					22	
Transect F 1	wetted width	<0.1m			23 Channel Feature:	
2	4.0 m	0.1m			24 RUN	
3		0.2m			25	
4	measurements	0.2m			26 Dissolved Oxygen	
5	0.4 m	0.3m			.	
6	apart	0.3m			. 8.2 ppm	
7		0.4m			. %	
8		0.3m			n	
9		0.2m				
10		0.1m				

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Gustafson **Date:** 5/22/07

Organization: BWR Position: ENV. SCI

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 3

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect G 1	wetted width	<0.1m			1 Channel Feature:	
2	2.0 m	0.1m			2 Run	
3		0.1m			3	
4	measurements	0.2m			4 Dissolved Oxygen	
5	0.2 m	0.2m			5	
6	apart	0.1m			6 8.4 ppm	
7		0.1m			7 84 %	
8		0.1m			8	
9		0.1m			9	
10		<0.1m			10	
					11	
Transect H 1	wetted width	<0.1m			12 Channel Feature:	
2	2.0 m	<0.1m			13 Run	
3		<0.1m			14	
4	measurements	0.1m			15 Dissolved Oxygen:	
5	0.20 m	0.1m			16	
6	apart	<0.1m			17 8.4 ppm	
7		0.2m			18 %	
8		0.2m			19	
9		0.1m			20	
10		0.1m			21	
					22	
Transect I 1	wetted width	0.7m			23 Channel Feature:	
2	5.0 m	0.3m			24 Pool	
3		0.5m			25	
4	measurements	0.7m			26 Dissolved Oxygen	
5	0.5 m	0.8m			.	
6	apart	0.8m			. 8.4 ppm	
7		0.7m			. %	
8		0.5			n	
9		0.4				
10		0.1				

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Rybicki **Date:** 5/22/07

Organization: BWR Position: Env. Sci

Data Sheet C – Cross-Sectional Depth Measurements (for estimation of median depth)

WBID # 1268 Site # 3

	Distance from Stream edge	Depth	Rank		Assigned Rank	Sorted depth
Transect J 1	wetted width	<0.1m			1 Channel Feature:	
2	4.0 m	0.2m			2 RUN	
3		0.2m			3	
4	measurements	0.2m			4 Dissolved Oxygen	
5	0.4 m	0.2m			5	
6	apart	0.2m			6 8.5 ppm	
7		0.1m			7 ___ %	
8		<0.1m			8	
9		<0.1m			9	
10		<0.1m			10	
					11	
Transect K 1	wetted width	<0.1m			12 Channel Feature:	
2	4.5 m	0.2m			13 RUN	
3		0.3m			14	
4	measurements	0.3m			15 Dissolved Oxygen:	
5	0.46 m	0.4m			16 JJ	
6	apart	0.4m			17 8.4 ppm	
7		0.3m			18 ___ %	
8		0.2m			19	
9		0.3m			20	
10		0.1m			21	
					22	
Transect 1	wetted width				23 Channel Feature:	
2	___ m				24	
3					25	
4	measurements				26 Dissolved Oxygen	
5	___ m				.	
6	apart				. ___ ppm	
7					. ___ %	
8					n	
9						
10						

If there is an odd number of entries find middle rank [(n+1)/2]. The corresponding sorted value depth to the middle rank is the median depth.
If there is an even number of entries, the median depth corresponds to the arithmetic average of the two depth values surrounding the middle rank.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Amy M. Bystrom **Date:** May 22, 2007

Organization: BWR Position: ENV. SCI.

Upstream (Site #1) of Tributary to Massey Creek.

Downstream (Site #1) of Tributary to Massey Creek.

Upstream (Site #2) of Tributary to Massey Creek.

Downstream (Site #2) of Tributary to Massey Creek.

Upstream (Site #3) of Tributary to Massey Creek.

Downstream (Site #3) of Tributary to Massey Creek.

Field Data Sheet for Recreational Use Stream Survey

Data Sheet D—Recreational Use Interview

Stream Name Trib to Massey Cr ***(WBID #*** 1268)

I. Introduction

Date & Time (include AM or PM): 4:00 5-21-07

Interviewed: ☒ In person ☐ By phone ☐ By mail
(NOTE: If you are an Interviewee filling out this form to mail back to DNR, proceed to Question #1.)

Interviewee selected because (e.g., house next to stream; standing by stream, etc.)_____

_____

Interviewer introduction to Interviewee: "My name is _____, I work for __(*name of your employer*)____, and I am collecting information on how people use __(*name of the stream*)____."

ASK:

1.) Are you willing to respond to a survey about this stream? (It will just take a few minutes.)
☐ Yes ☐ No If yes, list contact information for the interviewee below:
Legal name: HERSHAL "LOYD" MINKS
Current mailing address: 3207 E. 247TH ST. CLEVELAND MO 64734
Daytime phone number: (816) 618-3154
E-mail address (optional):

2.a.) Do you live in this area? ☒ Yes ☐ No
If yes, how many years?

2.b.) If you don't live nearby, are you still familiar with this stream? ☐ Yes ☐ No
If yes, how many years?
If no, thank the individual for taking the time to talk to you and conclude the interview.

3.) Are you familiar with this particular stretch of the stream? (show them the map, pointing out local landmarks such as roads, bridges, property lines) ☐ Yes ☐ No
If yes, proceed to "II. Personal Use?".
If no, proceed to Section V.

II. Personal Use?

1.) Have you or your family personally used the stream for recreation since November 28, 1975?
☐ Yes ☐ No
If yes, proceed to #3.
If no, proceed to #2.

2.a.) List reasons stream not used.

_____

_____

_____

2.b.) Proceed to "III. Witnessed Use?".

3.) How do you use the stream?

Whole Body Contact Recreation			
Swimming ☐	Tubing ☐	Snorkeling/Skin Diving ☐	Water Skiing ☐

If Interviewee (or family) used the stream for WBCR since Nov. 28, 1975, ask:

4.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

4.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol).

Secondary Contact Recreation				
Fishing ☐	Wading ☐	Boating ☐	Trapping ☐	Other: ☐ List:

If Interviewee (or family) used the stream for SCR since Nov. 28, 1975, ask:

4.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

4.d.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol).

III. Witnessed Use?

1.) Have you observed others using this stream for recreation since Nov. 28, 1975? ☐ Yes ☐ No

If yes, proceed to #2.
If no, proceed to, "IV. Anecdotal Use?".

2.) What kinds of uses have you witnessed?

Whole Body Contact Recreation			
Swimming ☐	Tubing ☐	Snorkeling/Skin Diving ☐	Water Skiing ☐

If Interviewee witnessed WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

2.b.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol)._____

Secondary Contact Recreation				
Fishing ☐	Wading ☐	Boating ☐	Trapping ☐	Other: ☐ List:

If Interviewee witnessed SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

2.d.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol)._____

IV. Anecdotal Use?

1.) Have you heard about anyone using this stream since Nov. 28, 1975 for recreation – not seen or done yourself, but just heard about it? ☐ Yes ☐ No

If yes, proceed to #2.

If no, thank the individual for taking the time to talk to you and conclude the interview.

2.) What kind of uses have you heard about?

Whole Body Contact Recreation			
Swimming ☐	Tubing ☐	Snorkeling/Skin Diving ☐	Water Skiing ☐

If Interviewee heard of WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

2.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol)._____

Secondary Contact Recreation				
Fishing ☐	Wading ☐	Boating ☐	Trapping ☐	Other: ☐ List:

If Interviewee heard of SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

_____

_____

2.d.) Where, exactly? Describe specific location *and mark on the* (See map requirements in the protocol)._____

_____

_____

_____

V. Others to Contact?

Can you recommend someone else we could contact that knows the stream? ☐ Yes ☐ No
If yes, that person's contact info (name, address, phone, directions?)_____

_____

_____

If no, thank the individual for taking the time to talk to you and conclude the interview.

VI. Additional Comments

1.) From the Interviewee: _____

_____

_____

_____

_____

_____

2.) From the Interviewer:_____

_____

_____

_____

_____

VII. Information on Interviewer

Has interviewer been trained by Missouri DNR to conduct UAA Interviews?
☐ Yes ☐ No If yes, how (check all that apply):
Workshop? (if so, enter date): _____
On-line training seminar? _____
Followed Interview Instruction Sheets?_____
Other_____

Interviewer Information:
Signature: _____
Printed Name:_____
Employer (where applicable):_____
Interviewer's phone #:_____ E-mail: _____

Field Data Sheet for Recreational Use Stream Survey

Data Sheet D—Recreational Use Interview

Stream Name _____ ***(WBID #*** _____)

I. Introduction

Date & Time (include AM or PM): 6:12 pm

Interviewed: ☐ In person ☒ By phone ☐ By mail
(NOTE: If you are an Interviewee filling out this form to mail back to DNR, proceed to Question #1.)

Interviewee selected because (e.g., house next to stream; standing by stream, etc.) OWNS PROPERTY AT STREAM

Interviewer introduction to Interviewee: "My name is _____, I work for _(*name of your employer*)_____, and I am collecting information on how people use _(*name of the stream*)_____."

ASK:

1.) Are you willing to respond to a survey about this stream? (It will just take a few minutes.)
☒ Yes ☐ No If yes, list contact information for the interviewee below:
Legal name: RAY BEETON
Current mailing address: 25010 S. GROH RD CLEVELAND, MO 64734
Daytime phone number: (816) 618-3089
E-mail address (optional):

2.a.) Do you live in this area? ☒ Yes ☐ No
If yes, how many years? 5 YEARS

2.b.) If you don't live nearby, are you still familiar with this stream? ☐ Yes ☐ No
If yes, how many years?
If no, thank the individual for taking the time to talk to you and conclude the interview.

3.) Are you familiar with this particular stretch of the stream? (show them the map, pointing out local landmarks such as roads, bridges, property lines) ☒ Yes ☐ No
If yes, proceed to "II. Personal Use?".
If no, proceed to Section V.

II. Personal Use?

1.) Have you or your family personally used the stream for recreation since November 28, 1975?
☐ Yes ☒ No
If yes, proceed to #3.
If no, proceed to #2.

2.a.) List reasons stream not used.

_____

_____

_____

2.b.) Proceed to "III. Witnessed Use?".

3.) How do you use the stream?

Whole Body Contact Recreation			
Swimming ☐	Tubing ☐	Snorkeling/Skin Diving ☐	Water Skiing ☐

If Interviewee (or family) used the stream for WBCR since Nov. 28, 1975, ask:

4.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

4.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol).

Secondary Contact Recreation				
Fishing ☐	Wading ☐	Boating ☐	Trapping ☐	Other: ☐ List:

If Interviewee (or family) used the stream for SCR since Nov. 28, 1975, ask:

4.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

4.d.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol).

III. Witnessed Use?

1.) Have you observed others using this stream for recreation since Nov. 28, 1975? ☐ Yes ☐ No

If yes, proceed to #2.
If no, proceed to, "IV. Anecdotal Use?".

2.) What kinds of uses have you witnessed?

Whole Body Contact Recreation			
Swimming ☐	Tubing ☐	Snorkeling/Skin Diving ☐	Water Skiing ☐

If Interviewee witnessed WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

2.b.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol)._____

Secondary Contact Recreation				
Fishing ☐	Wading ☐	Boating ☐	Trapping ☐	Other: ☐ List:

If Interviewee witnessed SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

2.d.) Where, exactly? Describe specific location *and mark on the map* (Seemap requirements in the protocol)._____

IV. Anecdotal Use?

1.) Have you heard about anyone using this stream since Nov. 28, 1975 for recreation – not seen or done yourself, but just heard about it? ☐ Yes ☐ No

If yes, proceed to #2.

If no, thank the individual for taking the time to talk to you and conclude the interview.

2.) What kind of uses have you heard about?

Whole Body Contact Recreation			
Swimming ☐	Tubing ☐	Snorkeling/Skin Diving ☐	Water Skiing ☐

If Interviewee heard of WBCR use since Nov. 28, 1975, ask the following questions:

2.a.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

2.b.) Where, exactly? Describe specific location *and mark on the map* (See map requirements in the protocol)._____

Secondary Contact Recreation				
Fishing ☐	Wading ☐	Boating ☐	Trapping ☐	Other: ☐ List:

If Interviewee heard of SCR use since Nov. 28, 1975, ask the following questions:

2.c.) When did these uses take place (e.g., year(s)?; season?; only after a rain?) and how often (times/year)?_____

2.d.) Where, exactly? Describe specific location *and mark on the* (See map requirements in the protocol).

V. Others to Contact?

Can you recommend someone else we could contact that knows the stream? ☐ Yes ☐ No
If yes, that person's contact info (name, address, phone, directions?)_____

If no, thank the individual for taking the time to talk to you and conclude the interview.

VI. Additional Comments

1.) From the Interviewee: Persons can access the stream easier to E. of his drive, if parking on his property * Do not park in grass. Usually home during the day, will be glad to help if necessary just call.

2.) From the Interviewer:_____

VII. Information on Interviewer

Has interviewer been trained by Missouri DNR to conduct UAA Interviews?
☐ Yes ☐ No If yes, how (check all that apply):
Workshop? (if so, enter date): _____
On-line training seminar? _____
Followed Interview Instruction Sheets?_____
Other_____

Interviewer Information:
Signature: _____
Printed Name:_____
Employer (where applicable):_____
Interviewer's phone #:_____ E-mail: _____